DOOSAN Document Transmittal Upper Trishuli-1 HEP (216MW)		Date 2022-04-26	DT No.: UT1-HEP-DHI-PC-D-0023	SHEET 1 OF 1
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SUBJECT	Review Note RN-0113_Arrangement Drawing of Diversion Tunnel			

S. N.	REVIEW NOTE NO.	REVIEW STATUS	DWG. / DOC. NO.	REV.	DWG. TITLE / DOC. DESCRIPTION	REMARK
1	RN-0113	RR	UT1-C-010-CVL-DG-42001	0D	Arrangement Drawing of Diversion Tunnel	
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Received by :

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Legend of Review Status
A : APPROVED
AN : APPROVED AS NOTED
RR : RETURN FOR RESUBMISSION
FI : FOR INFORMATION

DHI STAMP

Doosan Heavy Industries & Construction Co., Ltd. DOOSAN Branch Office Nepal

Issued by DHI

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Doosan Heavy Industries & Construction Co., Ltd.

Discipline : Civil

UPPER TRISHULI-1 HEP (216MW)

Client	**Nepal Water and Energy Development Company Private Limited**
Owner's Engineer	**Tractebel Engineering GmbH / Jade Consult**

REVIEW NOTE

Contractor	**Doosan Enerbility**		
Title of the Document	Arrangement Drawing of Diversion Tunnel, sheets 1-2		
Document No.	UT1-C-010-CVL-DG-42001	Revision	0D
Date of Documents	12.04.2022	Received Date	19.04.2022
Transmittal Form No.	UT1-HEP-DHI-D-0207		
Previous Review Date/Status	09.03.2022/RR	Prev. Review Note No.	RN-0082
Review Note No.	**RN-0113**	**Present Review Date**	**26.04.2022**
		Present Review Status	**RR**

A: Approved AN: Approved as Noted RR: Returned for Resubmission FI: For Information, only.

General comments:

The document under review is part of the Design Optimization Proposal process.

Comments to RC-0029

1. Tunnel lining:
   "Reply: The shotcrete of the tunnel roof is designed as permanent lining which indicated in section detail of UT1-C-010-CVL-DG-42001."
   OE´s comment:
   A proof of the durability of the shotcrete as a permanent tunnel lining of the Diversion Tunnel with pressurized and high flow velocities has not been provided yet especially in regards of roughness and irregularity of shotcrete lining.

2. Concrete Plug:
   Reply: Concrete plug is added and shown in revised drawing as per comment.
   OE´s comments:
   The concrete plug is indicated tentatively. The detailed design shall be considered as per drawings UT1_C_CFDR_039 to _047 (DKJV 2018).

3. Diversion tunnel outlet:
   Reply: The Contractor added titles and numbers of reference drawings as per comment.
   OE´s comments:
   For the Diversion Tunnel outlet, concrete outline drawings shall be provided.

DISCLAIMER

Any approval will not release the Contractor from any of his obligations under the Contract.

Sebastian Beck, Chief Design Engineer